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10/791,219	03/02/2004	Lois Weisman	IOWA:048US	3887

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EXAMINER	
LIU, SAMUEL W	
ART UNIT	PAPER NUMBER
1656	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/791,219	WEISMAN, LOIS	
	Examiner	Art Unit	
	Samuel W. Liu	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18,19,24-26 and 33-60* is/are pending in the application.

4a) Of the above claim(s) *33-60* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18,19 and 24-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the claims

Claims 18-19, 24-26 and 33-60 are pending.

The amendment filed 3/20/07 which cancels claims 1-17, 20-23 and 27-32, and amends claims 18-19, 24-26 has been entered. Claims 33-60 are withdrawn from further consideration (see the Office action mailed10/20/06). Claims 18-19 and 24-26 are examined in this Office action. Also, the applicant's request (filed 3/20/07) for extension of time of two months has been entered.

Withdrawal of objection and rejections

- The objections to the specification (except for the objection to abstract, see below) and drawings are now withdrawn in light of the amendment to the specification and Figures 1-2.

- The rejection of claims 18-19 and 24-26 under 35 USC 112, second paragraph is now withdrawn in light of the amendment to the claims.

Withdrawal of objection to drawing

- The objections to Figures 1 and 2 are now withdrawn in light of the amendment to Figure 1 and the amendment to the figure 2 lend in the specification which obviates the objection to Figure 2.

Maintained- Objection to the specification

The disclosure is objected to because of the following informalities:

Abstract of this application should be changed as follows to reflect the elected invention.

We claim an isolated polypeptide comprising the amino acid sequence of SEQ ID NO:3, which involves in the insulin-response pathway.

The response filed 3/20/07 submits that applicant requests that the objection to the Abstract be hold in abeyance as applicant may be entitled to rejoined of one of more method claims (page 12). It is of note that the method claims 33-60 as written are unrelated to the elected invention. Thus, the above objection is proper and maintained throughout prosecution.

Maintained -Duplicate Claims –Warning

Applicant is advised that should claims 25 and 26, which are virtually identical in subject matter and scope of the claims, be found allowable, claims 25 and 26 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

The applicant's response to the Duplicate Claims –Warning

At page 13, 1st paragraph, the response filed 3/20/07 argues that claims 25 and 26 do not run afoul the claim duplication prohibition of 37 CFR 1.75. The argument is not persuasive because the scopes of claims 25 and 26 are virtually identical from each other; i.e., "oligopeptide is 10, 15, 20, 25 or 30 residues in length" (claim 25) is identical to "the oligopeptide … wherein the number of consecutive residue is 10, 15, 20, 25 or 30" (claim 26), though the wording of these two claims differs.

New- Objection to claims

Claims 18-19 are objected to because the recitation of claim 18 "non-Vac14 sequence" lacks antecedent basis in the specification.

In claim 25, ""oligopeptide is " should be changed to "oligopeptide has".

New- Claim Rejections - 35 USC § 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

Claim 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites "oligopeptide of between 10 and about 30 residues"; the term "about" in said recitation render the metes and bounds of each oligopeptide (each oligopeptide, e.g., oligopeptide of 10 residues, is a *genus*) unclear. Claims 25-26 depending from claim 24 are also rejected because the claims do not cure the defect of claim 24.

Maintained-Claim Rejections - 35 USC § 112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24-26 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Written description

The factors considered in the Written Description requirement are (1) level of skill and knowledge in the art, (2) partial structure, (3) physical and/or chemical properties, (4) functional characteristics alone or coupled with a known or disclosed correlation between structure and function, and the (5) method of making the claimed invention. Disclosure of any combination of such identifying characteristics that distinguish the claimed invention from other materials and would lead one of skill in the art to the conclusion that the applicant was in possession of the claimed species is sufficient." MPEP §2163.

(1) Physical and/or chemical properties:

Claims 24-26 as written are directed to any fragments derived from instant SEQ ID NO:3 (consisiting of 907 amino acids) wherein said fragments are the oligopeptides have lengths consisiting of 10 to 30 consecutive amino acid residues. Neither the specification nor claim 24 describes structure and biological function of the claimed oligopeptide. Although the specification teaches that overexpression of Vac14p may result in an improper response to insulin (see [0276]), the specification is silent in teaching that the polypeptide of SEQ ID NO:3 or fragments thereof has any biological activity. Without knowing the assayable biological function(s) of said oligopeptides, the skilled artisan will not know how to characterize the oligopeptides. In the absence of adequate description of the relation between the structure and function of the claimed oligopeptides which are derived from full-length polypeptide of SEQ ID NO:3, applicant is not in possession of the claimed invention. The fragments derived from intact full-length polypeptide may have adverse biological activity to the full-length polypeptide, e.g., Eng (US Pat. No. 5424286) exendin-4 (full-length polypeptide consisiting of 39 amino acids) is an agonist for exendin receptor and stimulates insulin secretion (col. 6, lines 13-18) while the

fragment of said exendin-4, i.e., exendin(9-39), is an antagonist which inhibits the exendin-4 insulinotripoic activity (col. 7, lines 45-50, and Example 3). Thus, the description of the fragments/oligopeptides discussed above is necessary for applicant to have possession of the claimed invention.

(2) Functional characteristics/partial structure:

The partial sequences, i.e., the above-discussed oligopeptides derived from any portions of SEQ ID NO:3. None of amino acid sequences (chemical structures) of these partial sequences has been described in the instant disclosure.

To fully describe a genus ("an oligopeptide" without peptide sequence) of biochemical molecule, applicant must (1) fully describe at least one species of the claimed genus sufficient to represent said genus whereby a skilled artisan, in view of the prior art, could predict the structure of other species encompassed by the claimed genus and (2) identify the common characteristics of the claimed molecules, e.g., structure, physical and/or chemical characteristics, functional characteristics when coupled with a known or disclosed correlation between function and structure, or a combination of these. Without knowing the biological function of the claimed oligopeptide, one skilled in the art would be unable to assay or characterize functional peptide in order for the above-mentioned detection and identification, thereby, in order to screen for drugs of diagnosing or treating diabetes (see the page 3, the specification).

Furthermore, under some circumstance, fragment derived from parent (full-length) polypeptide can inhibit biological activity of the parent polypeptide. Henriksen et al. (*Gene Dev.* (2002) 16, 2379-2389) have shown that N-terminally truncated STAT (Signal Transducers and Activator of Transcription), i.e., short-form (a fragment of long-form), is an inhibitor of the STAT

long-form protein (wild-type STAT92E), wherein the short- and long-form proteins have about 84% sequence identity to each other. This suggests that deification of structure and function of the peptide fragments derived from parent polypeptide is necessary.

Lack of disclosure of structurally/functionally described species and the unpredictability of the art in the related field, applicant has failed to adequately describe a representative species of the claimed invention in such full, clear, concise, and exact terms that a skilled artisan would recognize that applicant was in possession of the claimed invention, i.e., the oligopeptides derived from the full-length SEQ ID NO:3. Since neither structure nor function of the claimed oligopeptides has been described in the instant application, the specification fails to provide adequate written description for the genus of the claims and does not reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the entire scope of the claimed invention.

(3) Level of skill and knowledge in the art:

When the claimed oligopeptide is produced and isolated, the functional parameter is required for one skilled in the art to be able to assay for and characterize the produced oligopeptide. In the absence of teaching of said functional parameters, the level of skill in this art is high.

The description requirement of the patent statue requires a description of an invention, not an indication of a result that one might achieve if one made that invention. See *In re Wilder*, 736, F.2d 1516, 1521, 222 USPQ 369, 372-73 (Fed. Cir. 1984) (affirming rejection because the specification does "little more than outlin[e] goals appellants hope the claimed invention achieves and the problems the invention will hopefully ameliorate.") Accordingly, it is deemed

that the specification fails to provide adequate written description for the genus of the claims and does not reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the entire scope of the claimed invention.

Scope enablement

Claims 24-26 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the isolated polypeptide comprising the full-length SEQ ID NO:3, does not reasonably provide enablement for the oligopeptide (claims 24-26) which consists of 10 to 30 consecutive amino acid residues of instant SEQ ID NO:3. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

Factors to be considered in determining whether undue experimentation is required, are summarized in Ex parte Forman, 230 USPQ 546(BPAI 1986). They include the nature of the invention, the state of the art, the relative skill of those in the art, the amount of direction or guidance disclosed in the specification, the presence or absence of working examples, the predictability or unpredictability of the art, the breadth of the claims, and the quantity of experimentation which would be required in order to practice the invention as claimed.

(1) The scope of the claims/(2) The nature of the invention:

The claims are broadly drawn to a large quantity of variant oligopeptides consisiting of 10 to 30 consecutive amino acid residues of SEQ ID NO:3 (907 residues). The specification (page 4, the 1st paragraph) sets forth the oligopeptides; however, nowhere in the specification teaches biological function and structure (peptide sequence) and function relation of the oligopeptide. It is of note that, on the same page 4, the specification sets forth antibody binding

to the polypeptide comprising full-length SEQ ID NO:3 but **not** to the oligopeptide thereof. This application is silent in teaching that the oligopeptides have activity, e.g., antigenic activity, of the full-length polypeptide. There are numerous fragments (or oligopeptides) derived from the full-length SEQ ID NO:3 (907 residues). Prescott et al. (*Curr. Drug. Target Inflamm. Allergy* (2002) 1, 65-75) teach that the short peptide fragments have major shortcomings in immunoactivity or antigenicity (see page 68, right column, 2nd paragraph). Hence, the scope of the claims is outside the bounds of the enablement.

(3) The unpredictability of the art:

The specification fails to teach the core sequence(s) critical for the function of the oligopeptide nor how to characterize and use the oligopeptides of SEQ ID NO:3 polypeptide. Thus, one skilled in the art cannot predict which oligopeptide will be functional. Truncation or deletion can result in unpredictable outcome to the protein/enzyme which is mutated; e.g., deletion of amino or carboxyl terminal 40-45 amino acids abolishes activity of α-SNAP (alpha soluble NSF attachment protein) (see page 876, the left column, Barnard et al. (*J. Cell Biol.* (1997) 139, 875-883). Thus, the function of oligopeptides (fragments) derived from the full-length SEQ ID NO:3 polypeptide is highly unpredictable. In addition, the short peptides have major shortcomings in immunoactivity or antigenicity (see page 68, right column, 2nd paragraph, Prescott et al. (2002) *Curr. Drug. Target Inflamm. Allergy*, 1, 65-75), suggesting that the outcome of use of the oligopeptide as an antigen which is immuno-therapeutically useful, is not predictable.

(4) The state of the prior art:

The general knowledge in the rat does not supplement the omitted description because specific, not general, direction is what is needed. The disclosure fails to describe common attribute and characteristics that identify the claimed oligopeptides which have the biological activity. As discussion above, the short peptides have major shortcomings in immunological uses (see Prescott et al.). The specification needs to provide the omitted teaching in this regard in order for enabling the claimed invention.

(5) The amount of direction/guidance:

The specification does provide neither guidance that teaches how to characterized (based on assayable activity of the oligopeptide, teachings regarding this is silent in the specification) and use the claimed oligopeptide (see above statement) nor information known in the art relative to said use. Therefore, the amount of direction/guidance for enabling the claimed invention lacks. In the absence of the direction/guidance, one skilled in the art is unable to practice the claimed oligopeptide.

(6) The quantity of experimentation necessary:

As discussed above (under factor 3), the specification neither teaches the core sequence(s) critical for the oligopeptide function in order to allow the skilled artisan to be able to identify biological (assayable) activity of the oligopeptide, nor provides the guidance with regard to direction in which the experimentation as to how to use the claimed oligopeptide should proceed. Thus, one skilled in the art cannot extrapolate the disclosed result (function) of the full-length SEQ ID NO:3 polypeptide to the claimed oligopeptides, i.e., fragments of SEQ ID NO:3. Screening for, identifying and using biologically active oligopeptides, therefore, require great quantity of experimentation. Quantity of the oligopeptides (consisiting of 10 to 30 consecutive

amino acid residues) derived from SEQ ID NO:3 polypeptide (907 residues) is enormous. Screening for and characterizing the functional oligopeptides require undue experimentation.

(7) The relative skill of those in the art:

The level of skill in this art is high and requires at least a molecular biologist with several years of experience in mutagenesis, microbiology as well as knowledge in peptide chemistry.

Reasonable correlation must exist between the scope of the claims and scope of the enablement set forth. In view of the quantity of experimentation necessary, the limited working examples, the nature of the invention, the state of the prior art, the unpredictability of the art and the breadth of the claims, it would take undue trials and errors to practice the claimed invention. Thus, the amount and level of experimentation needed is undue.

The applicant's response to the rejections under 35 USC 112, first paragraph

(1) *Written description*

At page 13, last paragraph, the response filed 3/20/07 argues that Applicant could easily generate sequence listing for each oligopeptide, and argues that although the quantity of the oligopeptides is large, it is a straightforward matter to identify each of the oligopeptides, and that envision of the claimed oligopeptides is immediately evident to the skilled artisan. At page 14, paragraphs 2-3, the response submits that though it is true that there is no working examples regarding biological function of the oligopeptides in instant specification, characterization of functional oligopeptides is not issue of written description. Thus, the response infers that the rejection does not sufficiently establish lack of written description under 35USC 112, first paragraph (page 15), and therefore requests withdrawal of the rejection thereof.

The applicant's arguments are not persuasive because the reasons below.

In spite of that applicant could generate the sequence listing for each amino acid sequences of the oligopeptides after filing the instant application, the specification fails to describe structure (amino acid sequence) and relationship of the structure and function of the disclosed oligopeptides. As discussed above, some fragments (oligopeptides) derived from the corresponding full-length polypeptide have the adverse biological function. Hence, characterization of the functional oligopeptides is a part of the written description requirement for the disclosed oligopeptide herein; and therefore. Description of the structure and function relation of the claimed oligopeptides is required to fulfill said requirement in order for applicant to have possession of the claimed invention.

Each oligopeptide consisting of consecutive 10-30 amino acids is a *genus* encompasses various peptide sequences. To fully describe the genus, it is needed to fully describe at least one species of the claimed genus sufficient to represent said genus whereby a skilled artisan, in view of the prior art, could predict the structure of other species encompassed by the genus (see above discussion). The specification fails to teach such the representative species. Adequate description of the structure (amino acid sequence) and function relation at least for the representative species may fulfill written description requirement because the reason discussed in the above rejection.

Without the structural parameter (sequence) and functional parameters, the claimed oligopeptides can be any random consecutive fragments (consisting of residues 10 to residues 30) for which applicant does not have possession. Of these fragments, some may act as inhibitors of the corresponding full-length polypeptide (see the Henriksen et al. reference discussed above), suggesting unpredictability of chemical/biological property of the disclosed oligopeptides. Thus, applicant is not in possession of the claimed oligopeptides. Therefore, the rejection is deemed

proper which has sufficiently addressed lack of the adequate written description for the disclosed oligopeptide recited in instant claims 24-26. The rejection thus stands.

(2) *Scope enablement*

At page 15, the response admits that the genus of the claimed oligopeptides is large (page 15, 3rd paragraph, lime 1). The response discusses issue regarding enabled use for the claimed oligopeptide, and submits that the oligopeptides can be used to produce antibodies; and submits that one would expect many of the oligopeptides to elicit at least a polyclonal response that would react to a denatured form of SEQ ID NO:3 which is sufficient to enable the claimed oligopeptides in general (see page 15, last paragraph). The response also argues that the presence of inoperative embodiments or peptide species within the scope of the claims does not necessarily render the claims nonenabled (page 16, lines 1-2). Thus, based on well-know raising antibodies using peptides, applicant infers that the oligopeptide of claims 24-26 are enabled by instant disclosure, and thus, the scope enablement rejection should be withdrawn (see page 16, 2nd paragraph).

The applicant's arguments are found unpersuasive because of the reasons set forth in the above rejection and the reasons below. The short peptide fragments may have immunological drawback with regard to antigenicity as taught by Prescott et al. (see the rejection abpve), suggesting that the outcome of use of the oligopeptide as an antigen for an immuno-therapeutic purpose is unpredictable (see above rejection). The specification fails to provide guidance or direction in this regard. Further, screening for and characterizing functional (operable) oligopeptides from a large pool of each oligopeptide (genus) consisiting of consecutive 10 -30 residues require undue experimentation. Thus, the scope of the claims is outside the bounds of

the enablement and thus not enabled. Therefore, the above rejection is deemed proper and maintained.

Claim Rejections - 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Robert et al. (US2003/0078374 A1).

In Example 4, Robert et al. teach the peptide sequence of SEQ ID NOs: 1-3622; of them, SEQ ID NO:2598 consisiting of 10 amino acid residues has sequence identity to residues 451-460 of instant SEQ ID NO:3 (see the attachment), which anticipates claims 24-26.

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1656.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Wei Liu whose telephone number is 571-272-0949. The examiner can normally be reached from 9:00 a.m. to 5:00 p.m. on weekdays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr Bragdon, can be reached on (571) 272-0931. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status information for unpublished applications is available through Private PAG only. For more information about the PAN system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SWL

Samuel W. Liu, Ph.D.
Patent Examiner, AU1653
May 23, 2007

ROBERT A. WAX
PRIMARY EXAMINER

Attachment

<!--StartFragment-->RESULT 10
US-09-572-404B-2598
; Sequence 2598, Application US/09572404B
; Publication No. US20030078374A1
; GENERAL INFORMATION:
; APPLICANT: Proteom Ltd
; TITLE OF INVENTION: Complementary peptide ligands from the human genome
; FILE REFERENCE: Human patent
; CURRENT APPLICATION NUMBER: US/09/572,404B
; CURRENT FILING DATE: 2000-05-17
; NUMBER OF SEQ ID NOS: 4203
; SOFTWARE: ProtPatent version 1.0
; SEQ ID NO 2598
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Homo Sapiens
; FEATURE:
; OTHER INFORMATION: sequence located in KIAA0274 at 451-460 and may interact with
Sequence
; OTHER INFORMATION: 2597 in this patent.
US-09-572-404B-2598

Query Match 1.1%; Score 10; DB 3; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.068;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 451 PDSYCSILRP 460
||||||||||
Db 1 PDSYCSILRP 10

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